

Translation

Notice: This document is a translation of the original Japanese document and is for reference purposes only. In the event of any discrepancy between this translated document and the original Japanese document, the latter shall prevail.

December 13, 2023
Alfresa Holdings Corporation

**Alfresa Corporation Completes a Joint Study with Tokyo Medical and Dental University
~Linking personalized medicine support platform NOVUMN and an electronic medical records system
to further increase convenience and administrative efficiency at medical institutions~**

Subsidiary Alfresa Corporation (head office: Chiyoda-ku, Tokyo; President: Yusuke Fukujin; hereafter “Alfresa”) and Tokyo Medical and Dental University have completed a joint study*1 to develop NOVUMN, a personalized medicine support platform, aimed at further improving convenience and administrative efficiency at medical institutions. The results of the study are specified below.

*1 Reference: “Notice regarding Alfresa Corporation’s joint study with Tokyo Medical and Dental University,” released on November 17, 2021 (Japanese only)
<https://ssl4.eir-parts.net/doc/2784/tdnet/2051240/00.pdf>

1. Background and Purpose of the Study

In recent years, there has been a rapid increase in the number of expensive biopharmaceutical drugs, including anticancer drugs, leading to increased inventory costs. Furthermore, these drugs are difficult to handle due to the small number of patients prescribed them and their low production number. To address these issues, Alfresa, PHC Corporation (head office: Minato-ku, Tokyo; President: Nobuaki Nakamura; hereafter “PHC”), and Fujitsu Japan Limited (head office: Minato-ku, Tokyo; President: Izumi Nagahori; hereafter “Fujitsu Japan”) have jointly developed NOVUMN, a personalized medicine support platform*2 that utilizes RFID, cloud-based infrastructure, and IoT technologies, and have begun providing commercial services to medical institutions. Alfresa has been collaborating with Tokyo Medical and Dental University since March 2021 to improve convenience and administrative efficiency at medical institutions by expanding the functions of NOVUMN.

*2 Reference: News release on November 19, 2020, announcing the commencement of pilot operations for personalized medicine support platform NOVUMN at three domestic medical institutions (Japanese only)
https://ssl4.eir-parts.net/doc/2784/ir_material12/152541/00.pdf

2. Outline of the Joint Study

To further improve operational efficiency at medical institutions, NOVUMN's interface was built to import necessary information from the electronic medical records system (made by Fujitsu Japan) used by Tokyo Medical and Dental University Hospital, automatically update administration schedules, and automate the input of drug administration schedules. In the joint study, a proof-of-concept experiment was conducted using test data to illustrate the possibility of improving inventory management operational efficiency for anticancer drugs and other pharmaceuticals through automation, confirming that it is theoretically possible to reduce input time significantly. The benefit of NOVUMN will be verified once participating medical institutions use the platform.

3. Future Initiatives

Alfresa will carry out activities to promote the features linking NOVUMN to Fujitsu Japan's digital medical records system realized through this study. Furthermore, by means of NOVUMN, Alfresa will continue to help medical institutions reduce their financial burdens and improve administrative efficiency in cooperation with PHC and Fujitsu Japan.

4. Impact on the Financial Results

While the impact of this study on performance is expected to be minimal at the current time, we believe that it will contribute to enhancing the Group's corporate value in the medium to long term.

If matters related to this agreement need to be disclosed in the future, we will inform the relevant parties promptly.

【Personalized Medicine Support Platform NOVUMN】

For specialty drugs*³, NOVUMN achieves strict temperature control throughout all stages of product distribution, traceability of individual pharmaceutical products, and improved inventory management functions for specialty drugs at pharmaceutical wholesalers and medical institutions. Through these functions, Alfresa aims to optimize the entire supply chain for specialty drugs. Additionally, with the aim of realizing such goals through the spread of NOVUMN, Alfresa, together with 22 pharmaceutical wholesalers*⁴ utilizing NOVUMN, PHC, and Fujitsu Japan,*⁵ decided to establish the Personalized Medicine Traceability Council*⁶ (hereafter "the Council") on March 1, 2021.

*³ Pharmaceuticals that require cold storage and expensive pharmaceuticals

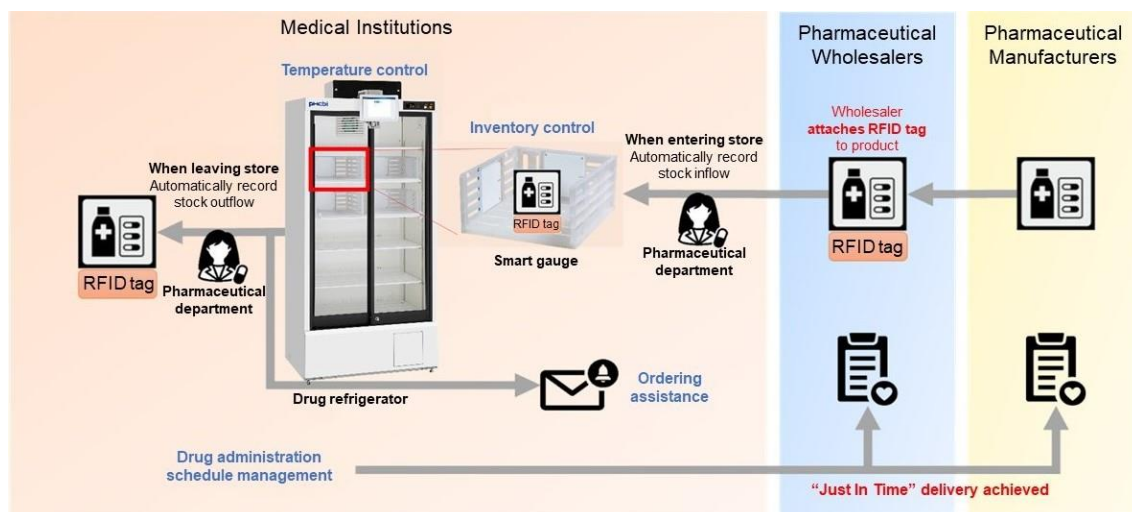
*⁴ As of June 2023, 24 pharmaceutical wholesalers are participating.

*⁵ PHC and Fujitsu Japan assist in the operation of the Council as supporting members.

*⁶ Reference: "Notice regarding Establishment of Council for Personalized Medicine Support Platform NOVUMN," released on February 22, 2021

https://ssl4.eir-parts.net/doc/2784/fr_material17/155225/00.pdf

Conceptual diagram of the service offered by personalized medicine support platform NOVUMN



About the Alfresa Group

The Alfresa Group is a leader in the Japanese healthcare industry and is dedicated to making its corporate philosophy, “we create and deliver a fresh life for all,” come true through a wide range of business lines, including ethical pharmaceuticals wholesaling, OTC pharmaceuticals wholesaling, pharmaceutical manufacturing, and operating dispensing pharmacies. Alfresa Holdings Corporation (TSE:2784) reported consolidated revenue of ¥2.6 trillion for the fiscal year ended March 31, 2023. For more information, please see: <https://www.alfresa.com/eng/>